NASA Planetary Science Division ROSES Open Science & Data Management Plan (OSDMP) TEMPLATE

Remove all blue italicized instructions prior to incorporating your OSDMP into your proposal document. An OSDMP describes how the scientific information that will be produced from SMD-funded scientific activities will be managed and made openly available, consistent with Federal laws and NASA policies. For most proposals, the OSDMP should require 1-2 pages of text in total; proposers should consult the program solicitation for page limits and the location of OSDMP within the proposal document. Proposers should also refer to the following documents when preparing their OSDMPs:

- Applicable SMD & PSD policies and requirements:
 - SMD Information Policy (SPD-41A)
 - PSD Information & Data Management Policy
 - ROSES Program Element C.1, Section 3.7: Increasing Access to the Results of Federally Funded Research
- Additional guidance:
 - SMD Open-Source Science Guidance
 - SMD Information Policy FAQ

If there are costs associated with performing the proposed OSDMP tasks, those costs must be accounted for in the proposal budget and/or budget justification.

Questions about OSDMPs can be sent to <u>SARA@nasa.gov</u> or the Point of Contact email at the end of the relevant NSPIRES solicitation, which can be found using the <u>NSPIRES Search</u> website.

1. Summary of the publications expected from the proposed project and description of plans for making the publications publicly available.

Publications include peer-reviewed manuscripts, technical reports, conference materials, and books. Publications resulting from SMD funding must be made freely available without any delay after the publication date. Authors can make their publications publicly accessible by either depositing their Open Access publications in the NASA Scientific and Technical Information (STI) Repository, or for articles not published as Open Access, depositing the author's as-accepted manuscript in the NASA STI repository. For articles published as Open Access by journal publishers participating in the Clearinghouse for the Open Research of the United States (CHORUS), the published article will be made publicly available in the NASA STI Repository on behalf of the authors.

In the OSDMP, summarize the expected publications from the proposed project and describe plans for making the data publicly available at or before the time of publication according to the above requirements.

2. Description of scientifically useful data expected to be produced by the proposed project and plans for making these data publicly available.

Scientifically useful data includes any data needed to validate the scientific conclusions of peer-reviewed publications (such as those communicated in figures, maps, and tables) as well as model and simulation outputs. Data underlying peer-reviewed manuscripts resulting from an SMD-funded research award must be made publicly available no later than the publication of the peer-reviewed article describing them. Any other scientifically useful data produced by the SMD-funded research award must be made publicly available by the end of the award's period of performance. Data must be made publicly available, unless restricted by applicable Federal laws and NASA policies.

Data made publicly available must be deposited in an archive or repository that is appropriate for the project and that will be managed for the long term (at least 25 years). Publicly available data must also: be machine readable; made available in non-proprietary, modifiable, and open formats; be findable, such that the data can be retrieved, downloaded, indexed, and searched; include robust standards-compliant metadata that clearly and explicitly describe the data; be reusable with a clear, open, and accessible data license; be citable using a persistent identifier.

Describe the expected data from the proposed projects and plans for making these publicly available according to the above requirements. Describe the major types of data to be produced, the approximate amount of each data type, the machine-readable format of the data, and any applicable data and metadata standards. Describe and justify the long-term archive or repository where the data would be deposited. Data must be shared, unless restricted by applicable Federal laws and NASA policies; if the award would produce no data or only exempted data, explain why.

3. Summary of the scientifically useful software expected to be produced by the proposed project and description of plans for making the software publicly available.

Scientifically useful software is that which is required to complete the proposed research, reproduce expected published results, and/or enable future research. Such software developed as part of an SMD-funded research award, which is not otherwise restricted by applicable Federal laws and NASA policies, must: be made publicly available under a permissive license; be deposited in an appropriate repository that is widely recognized by the community; be citable using a persistent identifier; and include a code of conduct and guidelines for how to make contributions. Software supporting a scientific peer-reviewed publication must be released no later than the publication. Any other such other software must be released, to the extent practicable, at the end of the period of performance.

Summarize the expected software from the proposed project and describe plans for making the software publicly available according to the above requirements. Describe and justify the repository for the software and its recognition by the community as an appropriate repository. Software must be shared, unless restricted by applicable Federal laws and NASA policies; if the award would produce no software or only restricted software, explain why.

4. Description and justification of any NASA high-end computing resource requests associated with the proposed project.

Describe the amount of NASA high-end computing resources being requested and on which NASA facility they are being requested, with justifications for both. Allocations to these resources are controlled with allotments based on availability, need, and previous use.

5. Description and justification for a physical materials archiving plan.

Physical materials include all astromaterials, synthesized physical materials and biomaterials, analog materials, and associated analytical standards. Any physical materials of scientific value that are collected, purchased, or produced by a PSD-funded research award, and are not consumed during the proposed research, must be made publicly available before the end of the award's period of performance. Any other materials should be made publicly available when it is practical and feasible to do so, and when there is scientific utility in doing so. All science data collected from these materials utilized in PSD-funded investigations must also be made available to the public as rapidly as possible, not to exceed the end of the award's period of performance.

Describe plans to make publicly available any physical materials with scientific value that would not be consumed during the research, including the intended archive or repository. Describe plans for the availability of any other materials, or justify why it is not practical or scientifically useful to do so. Describe plans for making the science data derived from the materials publicly available and justify the proposed timeline.

6. Roles and responsibilities of team members for the OSDMP tasks.

Explain which team members would perform what OSDMP tasks and indicate explicitly what those tasks would be and why the team member is qualified to perform them.

7. Best-effort compliance statements.

Include the following canned-language compliance statements (edited as needed):

To the best of my knowledge and ability, this OSDMP meets the current SPD-41A and PSD requirements. This project will not require any variances from NASA policy.

Due diligence has been done to ensure the repositories and/or archives referenced in this OSDMP will be able to receive the information as stated in this OSDMP.

The costs, both in resources and funding level, to support implementation of this OSDMP are accounted for in the proposal budget and/or budget justification.

If the project requires variances from NASA policy, include the following canned-language statement and provide justification. The Program Officer has the authority to approve, modify, or decline variance requests; granting variances is expected to be rare. Variances for longer than one year require review by the Chief Science Data Officer.

This OSDMP does not meet current SPD-41A and PSD requirements. A variance request, as described here, will be submitted to the cognizant Program Officer, if the proposal is selected.